PREPPERS GUIDE TO CANDIDA AURIS

GENERAL INFO: Candida Auris is a fungal infection typically found in hospitals. People who are in long term care with invasive equipment are at greatest risk of being infected. Contraction can occur from contact with an infected person or contaminated surface/tool. CDC data found a 3x increase in drug resistance during the year of 2021.

SYMPTOMS: Persistent rash, chills, fever, aches and fatigue, persistent wound/ear infection

FATALITY RATE: 30-60%

Source: https://www.webmd.com/a-to-z-guides/candida-auris

IDENTIFICATION

- 1. C. auris can be MISIDENTIFIED by commercial identification systems such as Vitek-2 (as C. haemulonii or C. famata) and API-20C (as Rhodotorula glutinis, C. sake or Saccharomyces cerevisiae) (13).
- 2. C. auris can be CORRECTLY IDENTIFIED by MALDI-TOF using "research-use only" databases and by sequencing of the internal transcribed spacer and D1-D2 domains (13)."

Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5764715/

DISINFECTANTS THAT WORK

- 1. Bleach
- 2. Chlorhexidine
- 3. Iodine

Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5324806/ Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5875262/

DISINFECTANTS THAT DO NOT WORK

- 1. Ammonia wipes
- 2. UV light

Source: https://doi.org/10.1017/ice.2017.239

Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5875262/

Source: https://www.sciencedirect.com/science/article/pii/S0195670117306424

TREATMENTS

- 1. Echinocandins: Micafungin, Caspofungin, Anidulafungin
- 2. Amphotericin B

Source: https://academic.oup.com/cid/article/66/2/306/4083688

POTENTIAL HOME THERAPIES

- 1. Colloidal silver (nebulized and topical)
- 2. Allicin (maybe, something to look in to)
- 3. Povidone Iodine (topical)
- 4. 2% Isopropanol & 70% chlorhexidine (topical)
- 5. Tea tree (Melaleuca alternifolia) oil and lemongrass (Cymbopogon flexuosus) oil enhance the activity of chlorhexidine/isopropanol.
- 6. Clove bud, and Cinnamon bark essential oils elicited antifungal activity in gaseous form.
- 7. Essential oils of bergamot, cinnamon bark, cinnamon leaf, clove bud, geranium, lemongrass, lime peel, peppermint, spearmint, and tea tree all elicited inhibitory activity at concentrations considered safe for dermal use
- 8. Boric Acid and triclosan showed antifungal activity against several candida species
- 9. Carvacrol and thymol show strong fungicidal effect against all Candida species tested

Source: https://www.sciencedirect.com/science/article/abs/pii/S0944711311003254

Source: https://link.springer.com/article/10.1007/s10096-010-1050-8

Source: https://www.sciencedirect.com/science/article/abs/pii/S0944711311003254

Source: https://www.mdpi.com/2309-608X/7/10/804

Source: https://onlinelibrary.wiley.com/doi/10.1111/myc.13302